

and heat treated by or under the supervision of persons or organizations defined as competent to make register entries and issue certificates pursuant to paragraphs (b) and (c) of this section.

(1) Annual thorough examinations under ILO 152 are required after July 27, 1998.

(2) Testing under ILO 152 is required after July 16, 2001.

(3) In the interim period(s), prior to the effective dates noted in paragraph (a) (1) and (2), vessels with cargo gear and a cargo gear register according to ILO 32 are deemed to meet the requirements of this paragraph (a).

(b) Public vessels and vessels holding a valid Certificate of Inspection issued by the U.S. Coast Guard pursuant to 46 CFR part 91 are deemed to meet the requirements of paragraph (a) of this section.

(c) With respect to U.S. vessels not holding a valid Certificate of Inspection issued by the U.S. Coast Guard, entries in the registers and the issuance of certificates required by paragraph (a) of this section shall be made only by competent persons currently accredited by the U.S. Department of Labor (OSHA) for full function vessels or loose gear and wire rope testing, as appropriate, as provided in part 1919 of this chapter.

(d) With respect to vessels under foreign registries, persons or organizations competent to make entries in the registers and issue the certificates required by paragraph (a) of this section shall be:

(1) Those acceptable as such to any foreign nation;

(2) Those acceptable to the Commandant of the U.S. Coast Guard; or

(3) Those currently accredited by the U.S. Department of Labor (OSHA), for full function vessels or loose gear and wire rope testing, as appropriate and as provided in part 1919 of this chapter.

### Subpart C—Gangways and Other Means of Access

#### § 1918.21 General requirements.

The employer shall not permit employees to board or leave any vessel, except a barge or river towboat, until

all of the applicable requirements of this subpart have been met.

(a) If possible, the vessel's means of access shall be located so that suspended loads do not pass over it. In any event, suspended loads shall not be passed over the means of access while employees or others are on it.

(b) When the upper end of the means of access rests on or is flush with the top of the bulwark, substantial steps, properly secured, trimmed and equipped with at least one substantial handrail, 33 inches (.84 m) in height, shall be provided between the top of the bulwark and the deck.

(c) The means of access shall be illuminated for its full length in accordance with § 1918.92.<sup>2</sup>

#### § 1918.22 Gangways.

(a) Whenever practicable, a gangway of not less than 20 inches (.51 m) in width, of adequate strength, maintained in safe repair and safely secured shall be used. If a gangway is not practicable, a straight ladder meeting the requirements of § 1918.24 that extends at least 36 inches (.91 m) above the upper landing surface and is secured against shifting or slipping shall be provided. When conditions are such that neither a gangway nor straight ladder can be used, a Jacob's ladder meeting the requirements of § 1918.23 may be used.

(b) Each side of the gangway, and the turntable, if used, shall have a hand rail with a minimum height of 33 inches (.84 m) measured perpendicularly from rail to walking surfaces at the stanchion, with a midrail. Rails shall be of wood, pipe, chain, wire, rope or materials of equivalent strength and shall be kept taut always. Portable stanchions supporting railings shall be supported or secured to prevent accidental dislodgement.

(c) The gangway shall be kept properly trimmed.

(d) When a fixed flat tread accommodation ladder is used, and the angle is low enough to require employees to walk on the edge of the treads, cleated

<sup>2</sup>§ 1918.92 requires, along with other requirements, an average light intensity of five foot-candles (54 lux).

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duckboards shall be laid over and secured to the ladder.

(e) When the gangway overhangs the water so that there is danger of employees falling between the ship and the dock, a net or suitable protection shall be provided to prevent employees from receiving serious injury from falls to a lower level.

(f) If the foot of a gangway is more than one foot (.30 m) away from the edge of the apron, the space between them shall be bridged by a firm walkway equipped with a hand rail with a minimum height of approximately 33 inches (.84 m) with midrails on both sides.

(g) Gangways shall be kept clear of supporting bridles and other obstructions, to provide unobstructed passage. If, because of design, the gangway bridle cannot be moved to provide unobstructed passage, then the hazard shall be properly marked to alert employees of the danger.

(h) Obstructions shall not be laid on or across the gangway.

(i) Handrails and walking surfaces of gangways shall be maintained in a safe condition to prevent employees from slipping or falling.

(j) Gangways on vessels inspected and certificated by the U.S. Coast Guard are deemed to meet the requirements of this section.

## § 1918.23 Jacob's ladders.

(a) Jacob's ladders shall be of the double rung or flat tread type. They shall be well maintained and properly secured.

(b) A Jacob's ladder shall either hang without slack from its lashings or be pulled up entirely.

(c) When a Jacob's ladder is used as the means of access to a barge being worked, spacers (bumpers) shall be hung between the vessel, barge, or other structure to which the barge is tied alongside, or other equally effective means shall be provided to prevent damage to the bottom rungs of the ladder.

(d) When a Jacob's ladder is being used so that there is a danger of an employee falling or being crushed between the vessel, barge, or other structure (pier), suitable protection shall be provided.

## 29 CFR Ch. XVII (7-1-06 Edition)

### § 1918.24 Fixed and portable ladders.

(a) There shall be at least one safe and accessible ladder for each gang working in a single hatch. An effective means of gaining a handhold shall be provided at or near the head of each vertical fixed ladder. No more than two ladders are required in any hatch regardless of the number of gangs present.

(b) When any fixed ladder is visibly unsafe (or known to be unsafe), the employer shall identify such ladder and prohibit its use by employees.

(c) Where portable straight ladders are used, they shall be of sufficient length to extend three feet (.91 m) above the upper landing surface, and be positively secured or held against shifting or slipping. When conditions are such that a straight ladder cannot be used, Jacob's ladders meeting the requirements of § 1918.23 may be used.

(d) For vessels built after July 16, 2001, when six inches (15.24 cm) or more clearance does not exist behind the rungs of a fixed ladder, the ladder shall be deemed "unsafe" for the purposes of this section. Alternate means of access (for example, a portable ladder) must be used.

(e)(1) Where access to or from a stowed deckload or other cargo is needed and no other safe means is available, ladders or steps of adequate strength shall be furnished and positively secured or held against shifting or slipping while in use. Steps formed by the cargo itself are acceptable when the employer demonstrates that the nature of the cargo and the type of stowage provides equivalent safe access.

(2) Where portable straight ladders are used they shall be of sufficient length to extend at least three feet (.91 m) above the upper landing surface.

(f) The following standards for existing manufactured portable ladders must be met:

(1) Rungs of manufactured portable ladders obtained before January 21, 1998 shall be capable of supporting a 200-pound (890 N) load without deformation.

(2) Rungs shall be evenly spaced from nine to sixteen and one-half inches (22.9 to 41.9 cm), center to center.